**30th IAIA conference, Geneva, April 2010**

# The efficiency of "greening tourism approaches"

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## Introduction and background

In this paper we want to discuss and compare the three crucial environmental assessment and management frameworks:

- The Strategic Environmental Assessment (SEA)
- The Environmental Impact Assessment (EIA)
- Environmental Management Systems (EMS)

The evaluation will be undertaken with examples from resource dependent tourism in Egypt and Austria.

Few other economic sectors are as dependent on natural surroundings as the tourism industry. In many cases hotels profit indirectly from the natural setting of their locations, or outdoor sports facilities (i.e. golf courses, skiing lopes, hiking trails) depend on the natural resources even more directly, and benefit from the scenery to the same extent. Whenever tourists are asked about their most important motivation for selecting a given destination, "landscape" is often the key factor (Österreich Werbung 2009), especially for the types of tourism for which sports and outdoor recreation are major components.

Tourism is one of the major sources of income in Austria and Egypt. Market research has shown that in both countries nature is one of the main attractions for tourists to visit in addition to culture. In the case of Austria, the landscape serves as both scenery and activity platform, in the case of Egypt the attractions of the sea lure thousands of tourists for snorkelling and diving, or lazing on the beaches.

In resource dependent tourism it is a challenge to find the happy medium between use and abuse. Both mandatory and voluntary measures have been applied to balance the consumption of natural resources. The success of these instruments is often been questioned, especially by the tourism sector itself, which frequently sees them as barriers for development. In particular the overlapping goals and competences between these instruments have been criticized.

We want to discuss the application of these tools, and their influence on the sustainable development of tourism and the tourism industry, and examine whether these instruments are complementary to each other or overlap without creating additional synergies. Such a comparison is crucial for identifying any unnecessary financial burdens and time constraints.

## Method

The opportunity to compare the SEA/EIA processes in Austria and Egypt availed itself during a Tempus III project (CEIAC) funded by the European Union. As for both countries tourism is a very important sector the focus during the project was set on tourism related case studies.

The comparison is based on a review of the legal background as well as the application through the analysis of case studies in both countries. For the EMS comparison, Spain was added as a third country, with numerous applications in the field of tourisms (Brom 2009).

Of special interest are the following two hypotheses:

- Are instruments overlapping and do they cause waste of fiscal resources, without creating any additional benefits?
- If the additional benefits cannot be recognized, is it possible to avoid duplication?

The conclusion comes up that voluntary instruments are generally more acceptable and have therefore more influence than mandatory instruments. We want to analyse whether and to what extend this is true and identify the limitations of both mandatory and voluntary instruments.

**Results**

The following table (1) shows the scope, the planning context and the types of application to tourism by the three instruments.

| Instrument/ characteristics | scope | planning context | influence on tourism development |
|---|---|---|---|
| **SEA** | strategic level, regional or local | land use planning, (zoning plans, local development concepts), landscape planning (if regulated by law) | decision on location, demand and surrounding conditions (infrastructure etc) strategic alternatives |
| **EIA** | project level | construction planning (plus possible changes in zoning) | avoidance and mitigation of negative impacts of concrete tourism projects, discussion of alternatives |
| **EMS** | project or cluster approach | not integrated into planning; legal certainty is one major content | monitoring the operational process, target-system to steady improvements, training of staff and information of guests |

SEA influences the large scale spatial organization of tourism in a region, based on an understanding of tourism demand and the sustainable framing conditions which are influenced by anticipatory planning. At an early stage, SEA allows thinking about the relationships between public transport, sensitive natural settings and placement of tourism infrastructure strategically, etc. The social acceptance of tourism, especially if some special types of development, such as second homes are likely to occur can be discussed at this stage (they might of course also be subject to Social Impact Assessment). These considerations take place during the examination of land use plans and local development plans and – if in use – can already be influenced by regional planning level.

All aspects which have not been solved at an early planning phase turn up again as soon as concrete tourism development projects are proposed. Within a properly implemented SEA in use considerations about location and size (according to the demand) are effectively discussed already beforehand (Therivel and Partidario 1996, Schmidt et. al 2005). Otherwise they appear again at the project level. If the tourism project exceeds a certain size or is planned in a sensitive environment, an EIA has to be carried out. This detailed assessment of the impacts on biotic and abiotic environmental issues and human health reveals the effects as well as the mitigation strategies to avoid or compensate negative effects.
An EIA considers the building process, the facilities and the overall operation. In this context predictions are made regarding the environmental effects of the project. If monitoring is required, which is mandatory in some countries only (e.g. in Austria) – these effects are evaluated as well as the likely success of mitigation measures. It is important to keep in mind that an EIA does not provide any continuing, overall insight into the operational processes and their cause-effect relationships.

This is the starting point for Environmental Management Systems (EMS), which provide a detailed overview of the production and the operating processes, as well as suggest steady improvements and continuing optimization of the processes (Aichinger 2006). EMS is based on continuous improvements over the long term and the initial efforts into developing the framework are cost-effective only over time. One major component of EMS is the knowledge and transparency it provides about a firm's own consumption rates, which reveals potential for economic savings (Bundesministerium für Land- und Forstwirtschaft, Umwelt- und Wasserwirtschaft 2002).

Graph 2 shows the timeframe of the three instruments during the development stages (or life-cycle) of tourism operations: the construction, the facilities per se (the existing facilities without operation) and the operational phase.

| **Instrument/phase** | **Facilities** | **Construction** | **Operation** |
|---|---|---|---|
| **SEA** | | | |
| **EIA** | | | |
| **EMS** | | | |

The graph shows that overlaps between the three instruments occur during these stages and that a certain tiering between the instruments is evident.

SEA is the most important / relevant instrument at the beginning of the life-cycle of a tourist development; its purpose is to evaluate the alternative options, and to assess the relationships between the project and the surrounding environment during the construction phase (e.g. connection to road systems, connection to existing infrastructure). EIA substantiates the impact assessment when the project becomes concrete. Provided the described timely sequence SEA contributes to strategic development in tourism planning.

Whereas in Egypt the SEA is not yet legally defined and only select case studies attempt to show the potential benefits of strategic planning for large-scale integrated tourism projects, in Austria SEA is mandatory for land use planning and local development. A differentiated legal interpretation of the EU Directive in the nine federal states of Austria led to a very heterogeneous application practice (Jiricka, Pröbstl 2008).

In the transnational comparison two negative trends were observed:

1. No SEA is exists, as the planning level is missing relevant mandatory instruments; or
2. SEA is avoided until a concrete project is subject to an EIA, and both assessments are carried out concurrently

Case studies from Austria show that an SEA at an earlier stage would have been able to avoid expenses for an EIA at inappropriate locations (e.g. the case of Alpenpark Turracher Höhe in Austria - Büro Reisinger 2007). When both assessments are carried out parallel to each other, the benefit is doubtable as no adequate alternative discussion is possible.

Not only the application of the SEA is limited in practice however, also the EIA is scarcely applied. The transnational comparison shows in both countries, Egypt and Austria, threshold definitions, which restrict the number of assessments significantly. Whereas in Egypt the threshold is defined as a physical environmental measure (i.e. the distance of the project to the shoreline) (see www.eeaa.gov.eg), in Austria the judgement about the sensitivity of a location is considered and actually determined by the number of beds for hotel infrastructure (Umweltverträglichkeitsprüfungsgesetzt 2000, i.d.g.F). The trend to undermining thresholds marginally is noticeable in both countries.

When comparing Austria with Germany regarding the definition of thresholds, one observes very similar natural conditions in the cross-border mountain regions, yet the thresholds in Austria (expressed in bed capacity) are much higher compared to Germany, leading investors to attempt to transfer larger tourism projects across the border.

EMS may play an important role towards the greening of tourism projects by investigating the projects' energy and materials consumptions and balances during the operational process. Thus, predictions of the EIA can be assessed and feedback for future tourism developments is possible. A new approach focuses on "cluster-EMS" – this idea corresponds more to strategic planning and management of tourism development and could correspond to change-management in land use planning. In this context also feedback to future SEA is possible.

Currently both in Egypt and in Austria EMS is scarcely used in a tourism context. In Austria quality certifications are applied, such as the EU-environmental sign for tourism operators (www.eco-label.com) and the national environmental quality sign (Bundesministerium für Land- und Forstwirtschaft, Umwelt- und Wasserwirtschaft 2005www.umweltzeichen.at). The national environmental sign has a much larger recognition and better reputation among customers than EMS. On the other hand, in countries with high application rates of EMS (e.g. Spain and Italy) environmental quality signs have a lower recognition (Brom 2009).

As EMS is a voluntary approach no direct comparison of standards regarding the environmental effects between different tourism facilities (e.g. in transnational context)

is possible, whereas the EU-quality sign for tourism is regulated by the European Directive (Europäische Komission 2003) and guarantees certain standards. The advantage of EMS is transparency for both the company itself and the public and the commitment to ongoing improvements under the application of a Europe-wide procedure of managing environmental effects. Provided different starting positions, achievements through the EMS and the resulting environmental sustainability can vary significantly between countries and even among companies with the same nationality though.

**Conclusion and Outlook**

When comparing the purpose and the timing of implementation of the three main European environmental management instruments SEA, EIA and EMS within the life cycle of tourism operations, it becomes apparent that in the case of tourism the three main instruments of environmental planning and management could be complementary to improve environmental conditions. However, several shortcomings were observed

Within the analysis of application practice deficiencies become obvious however, especially due to the very high thresholds before a process must be applied, thus these frameworks do not contribute to a greening of tourism. In the case of Austria, investors criticize the differences between European countries and the delayed but huge and expensive assessment without a real option for thinking in alternatives is irritating and seen as a burden.

Better than carrying out highly detailed examinations for only a few projects, an early, pro-active approach towards strategic tourism planning should be favoured. In this context the lack of strategic planning for the tourism sector is evident (e.g. Baumgartner 2000). SEA (and SIA for socio-cultural aspects) could help to identify alternatives, discuss demands, which help to green tourism and allow the consideration of cumulative effects and relationships between existing and planned approaches. In the two countries analysed in this study, the application of SEA is not yet satisfying - either because there is no mandatory planning background (Egypt) or the avoidance due to partly inadequate interpretation of European regulations (Austria).

Necessary feedback to the planning perspective could be contributed by cluster EMS approaches or tourism management frameworks such as the Tourism Optimization Management Model (Manidis Roberts Consultants 1997). The quality of the procedure rises and falls with the environmental standards (legal background) in the respective countries and the acceptance (public interest) of the environmental performance however.

Altogether the efficiency of the “greening of tourism approaches” is rather limited and especially in the countries analysed voluntary tourism management approaches (EMS, quality signs) proved to be more successful than mandatory regulated instruments. The analysis shows, however, that instruments are complementary and contribute, when regularly applied, to a more strategic and sustainable planning in tourism business. The emphasis should be on the complementarities and mutual feedback between the different planning levels.

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